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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,869	12/31/2003	Robert Edward Gamble	24AT-135859	6292

7590 05/15/2008
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EXAMINER

PALABRICA, RICARDO J

ART UNIT	PAPER NUMBER
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3663

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05/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/749,869	Applicant(s) GAMBLE ET AL.	
	Examiner Rick Palabrica	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-19 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) 13-16, 27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-12, 17-19, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's 2/29/08 Amendment, which directly amended claims 5 and 17, and traversed the rejection of claims in the 11/30/07 Office action, is acknowledged.

Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 5-12, 17-19, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Artnik et al. (U.S. 5,343,506), who disclose a nuclear reactor with a core catcher (see Figs. 1-6).

As to base claims 9 and 17, applicant's claim language reads on Artnik et al.'s invention as follows: a) containment vessel reads on reactor safety vessel1; b) "suppression pool" reads on cooling water reservoir 24; c) "reactor vessel" reads on pressure vessel 6; d) "drywell" reads on the reactor volume between protective structure 7 and separating wall 27; e) "floor" reads on concrete structure 4; f) "drywell sidewall extending from said floor" reads on separating wall 27; g) "base grid" reads on the horizontal base of collecting basin 19; h) "base grid shield wall" reads on the vertical

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wall disposed from the base of basin 19; i) "top plate" reads on base body 19a of collection basin 19 (see also col. 11, lines 60+); j) "bottom plate" reads on any one or the combination of turbulent bodies 34 (e.g., see Fig. 2B); k) "refractory material disposed on top plate" reads on protective shell 19b made of crucible material (see also col. 11, lines 64+); l) "flow baffle in the sump" reads on the baffle shown, e.g., at the bottom of Fig. 2B, 3B, that directs the inlet flow f2 through inlet 31; m) "inlet flow channel" reads on inlet channel 31 (see also col. 11, lines 27+); n) "outlet channel" reads on outlet channel 32 (see left side of Fig. 1 also col. 11, lines 41+).

As to claim 5, see Fig. 2B showing the inlet passage 31 positioned to discharge water from the suppression pool 24 to the sump proximate the flow baffle.

As to claim 6, see Fig. 2B showing inlet passage 31 substantially parallel to the floor (i.e., concrete structure 4).

As to claim 7, see left side of Fig. 1 showing outlet passage 32 positioned above the flow outlet side of the flow baffle.

As to claim 8, see left side of Fig. 1 showing the outlet passage 32 extends upwardly from the sump to the suppression pool 24.

As to claims 10 and 18, see Figs. 2B, 3B showing the flow baffle providing a sinuous (i.e., serpentine) flow path in the sump.

As to claims 11 and 19, see Figs. 2B and 3B, showing the flow baffle having a base end and a tip end, with the base end having a larger cross sectional area than the tip end.

As to claims 12 and 26, Artnik et al.'s flow baffle includes a flow inlet side (i.e., below the baffle) and a flow outlet side (i.e., above the baffle).

As to claim 25, Applicant's claim language "cone" is a generic term that includes a "truncated cone". Artnik et al.'s flow baffle 27, which is in the shape of a truncated cone and coupled to the bottom plate, i.e., either one or the combination of turbulence bodies 34 (see Figs. 2B, 3B and col. 11, lines 15+).

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, "to define a sump therebetween", "inlet", "outlet", "providing flow communication," etc. These clauses, as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Any one of the systems in the cited references is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited references.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 12, 2008

/Rick Palabrica/
Primary Examiner, Art Unit 3663